

(19)



JAPANESE PATENT OFFICE

DS

AP

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 11103878 A

(43) Date of publication of application: 20 . 04 . 99

(51) Int. Cl

C12P 7/04

(21) Application number: 09272554

(71) Applicant: MITSUBISHI CHEMICAL CORP

(22) Date of filing: 06 . 10 . 97

(72) Inventor: SAKAMOTO TAKESHI
UEDA MAKOTO

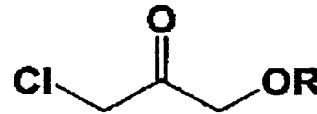
(54) OPTICALLY ACTIVE
1-ACYLOXY-3-CHLORO-2-PROPANOL, AND
PRODUCTION OF OPTICALLY ACTIVE
3-CHLORO-1,2-PROPANEDIOL

COPYRIGHT: (C)1999,JPO

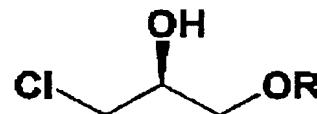
(57) Abstract:

PROBLEM TO BE SOLVED: To simply obtain the subject compound high in optical purity and useful as a raw material for synthesizing medicines, agrochemicals and the like by allowing the cells of a specific microorganism and/or their preparation to act on a 1-acyloxy-3-chloro-2-propanone.

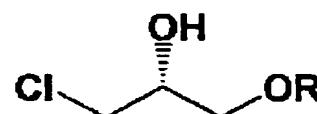
SOLUTION: The cells of a microorganism having an ability to stereo- specifically reduce the carbonyl group of a 1-acyloxy-3-chloro-2-propanone of formula I (R is an acyl) and/or the preparation of the cells is allowed to act on the compound of formula I to obtain a (S)-1-acyloxy-3-chloro-2-propanol of formula II or a (R)-1-acyloxy-3-chloro-2-propanol of formula III. A microorganism belonging to the genus Geotricum, Aureobasidium, Hortaea, Rhodotolura, Pichia or Hanseniaspora is preferable.



I



II



III